

Replacement Instructions

hp StorageWorks MSA1500 cs Chassis

These instructions apply to the MSA1500 cs product family. The part may also be used in other HP products. Please refer to documentation for your specific product for detailed replacement instructions.



If the product in which this part is being replaced is still under HP warranty, then the replacement part(s) referred to in these Replacement Instructions is provided under the terms and conditions of the Hewlett-Packard Company Limited Warranty for that product. A copy of this Limited Warranty may be viewed at:

<http://h18006.www1.hp.com/products/storageworks/warranty.html>

If this is a trade sale part (product out of warranty), then the replacement part(s) referred to in these Replacement Instructions is provided under HP's express limited warranty statement, which may be viewed at:

http://customerops.corp.hp.com/1sw/pdm_om/warranty_support/policies/2330100.doc

The replacement part takes on either the Limited Warranty Period of the part being replaced or a ninety-day period that begins upon installation of the replacement part, whichever is greater.

The information contained on these replacement instructions is subject to change without notice. The only warranty for this replacement product is as noted above. Nothing in these replacement instructions should be construed as constituting an additional warranty. The information provided in these replacement instructions is provided "AS IS" and HP is not liable for technical or editorial errors or omissions contained herein.

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Printed in Singapore.

About this document

This document details the procedures for replacing a failed MSA1500 cs chassis.

Before you begin

Read the following cautions and information before beginning removal and replacement procedures.



Caution: Parts can be damaged by electrostatic discharge. Use proper anti-static protection. Refer to the documentation that shipped with your system for additional information.



Caution: It is important to follow these instructions when replacing components in the MSA1500 cs. If the procedure is done improperly, it is possible to lose data or damage equipment.



Caution: Before replacing this component ensure that steps have been taken to prevent loss of data.

Removing the components from the failed chassis

Step 1: Ready the MSA1500 cs for chassis replacement

1. Power off the MSA1500 cs.

Note: Before disconnecting any cables, label all cables. This ensures their reconnection in the correct configuration.



Caution: Use appropriate precautions when handling Fibre Channel cables:

- Touching the end of a Fibre Channel cable will either damage the cable or cause performance problems, including intermittent difficulties accessing the storage.
- Whenever a Fibre Channel cable is not connected, replace the protective covers on the ends of the cable.

2. Disconnect the power cables from the MSA1500 cs.
3. Disconnect the fibre cable from the MSA1500 cs.
4. Disconnect the SCSI cables from the MSA1500 cs.
5. Remove the MSA1500 cs from the rack.

MSA1500 cs Chassis Replacement Instructions

First Edition (April 2004)

Part Number: 364862-001



364862-001

Step 2: Removing the Fibre Channel I/O module

1. Lift the port-colored Fibre Channel I/O module latch ❶ and pull the I/O module out of the enclosure ❷ as shown in Figure 1.

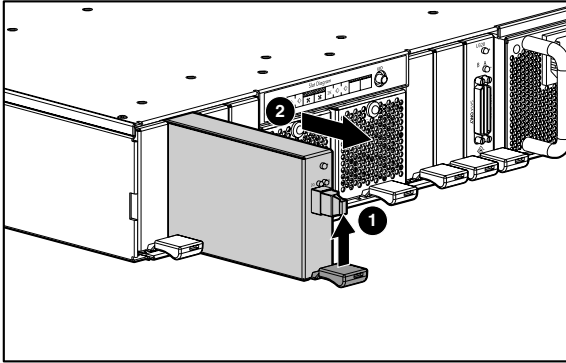


Figure 1: Removing the Fibre Channel I/O module

2. Repeat for the second Fibre Channel I/O module, if installed.

Step 3: Removing the SCSI I/O module

1. Lift the port-colored SCSI I/O module latch ❶ and pull the SCSI I/O module out of the enclosure ❷ as shown in Figure 2.

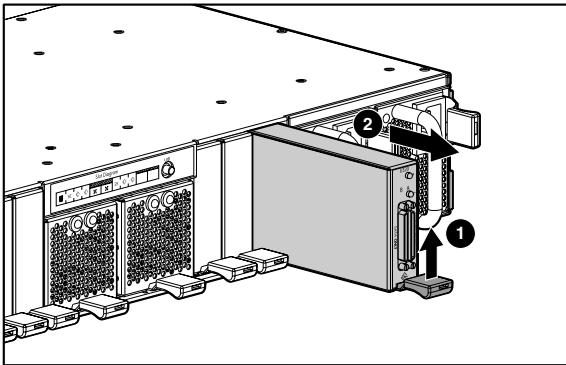


Figure 2: Removing the SCSI I/O module

2. Repeat for any additional SCSI I/O modules, if installed.

Step 4: Removing the fan module

1. Lift the port-colored fan module latch ❶ and pull the fan module out of the enclosure ❷ as shown in Figure 3.

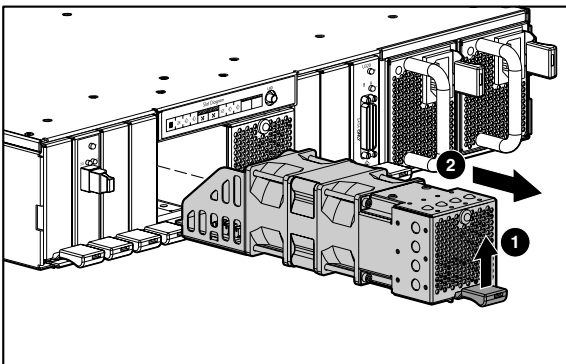


Figure 3: Removing the fan module

2. Repeat for the redundant fan module.

Step 5: Removing the power supply

1. While pushing the power supply port-colored module latch ❶, pull the power supply out of the enclosure ❷ as shown in Figure 4.

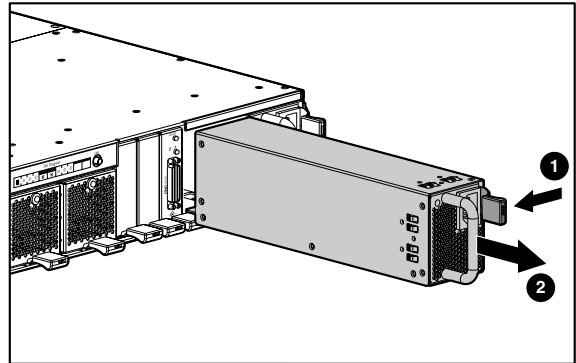


Figure 4: Removing the power supply

2. Repeat for the redundant power supply.

Step 6: Removing the controller

1. Press the thumb latch and rotate the latch handle out ❶.
2. Pull the controller straight out of the chassis ❷ as shown in Figure 5.

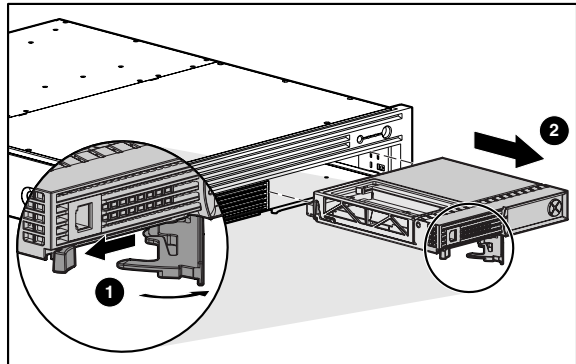


Figure 5: Removing the controller

3. Repeat for the redundant controller, if installed.

Step 7: Removing the bezel

1. Remove the bezel by pulling it away from the front of the chassis as shown in Figure 6.

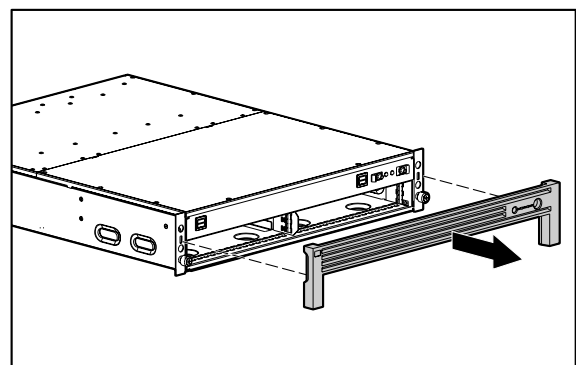


Figure 6: Removing the bezel

Installing components in the new chassis

After all of the components have been removed from the failed chassis, they must be installed in the replacement chassis.

Step 8: Installing the bezel

Install the bezel by snapping it on the front panel.

Step 9: Installing the controller

1. Insert the controller into the chassis.
2. Push the controller in as far as it will go ❶ and press the latch inward until it is flush against the front panel ❷ as shown in [Figure 7](#).

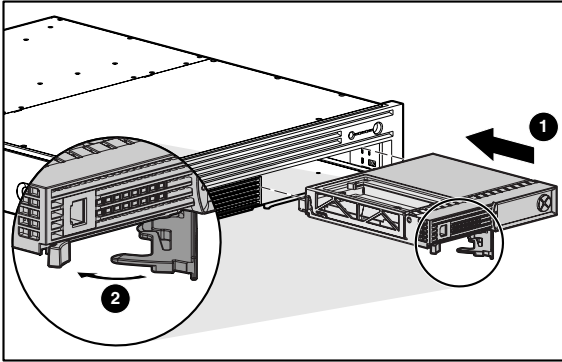


Figure 7: Installing the controller

3. Repeat for the redundant controller, if needed.

Step 10: Installing the power supply

1. Remove any connector protector that may be covering the power connector on the front of the new power supply.
2. Install the power supply by pushing the power supply module latch to the left and pushing in the base until the assembly is fully seated in the enclosure as shown in [Figure 8](#).

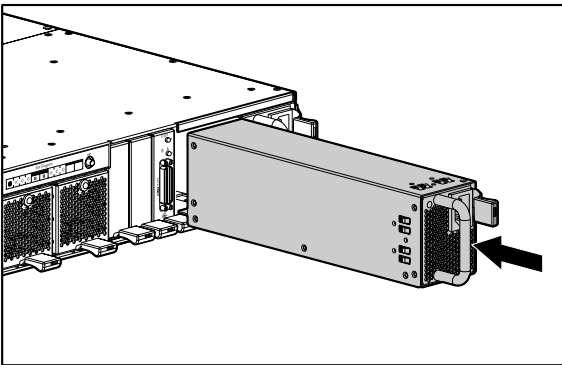


Figure 8: Installing the power supply

3. Repeat for the redundant power supply.

Step 11: Installing the fan module

To install the fan module:

1. Remove any connector protector that may be covering the connector on the front of the new fan module.
2. Slide the fan module into the bay until it clicks into place as shown in [Figure 9](#).

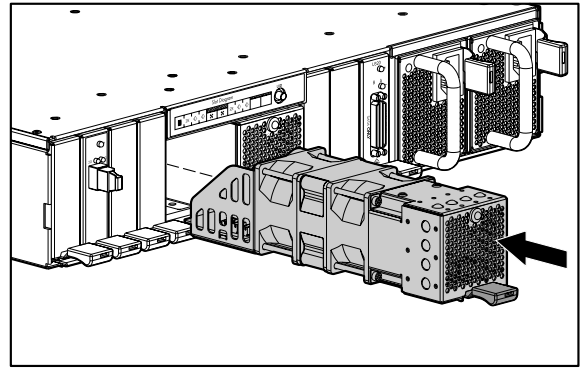


Figure 9: Installing the fan module

3. Repeat for the redundant fan module.

Step 12: Installing the SCSI I/O module

To install the SCSI I/O module:

1. Slide the SCSI I/O module into the bay until it clicks into place as shown in [Figure 10](#).

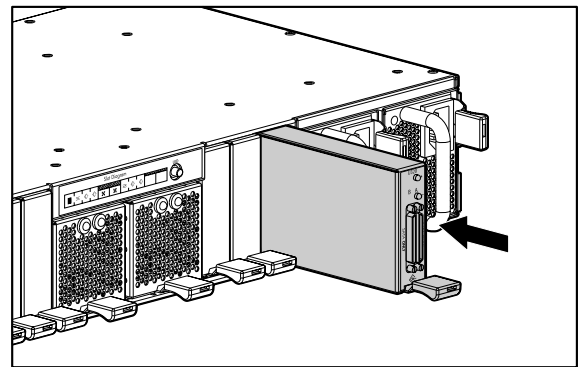


Figure 10: Installing the SCSI I/O module

2. Repeat for any additional SCSI I/O modules, if needed.

Step 13: Installing the Fibre Channel I/O module

To install the Fibre Channel I/O module:

1. Slide the Fibre Channel I/O module into the bay until it clicks into place as shown in [Figure 11](#).

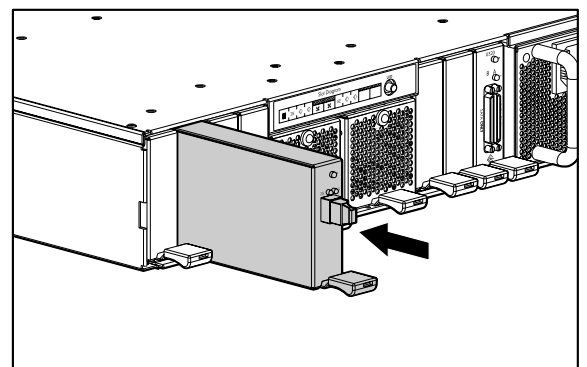


Figure 11: Installing the Fibre Channel I/O module

2. Repeat for the second Fibre Channel I/O module, if needed.

Step 14: Completing the MSA1500 cs chassis replacement

When finished, write the serial number, shown on the original chassis, on the label of the replacement chassis, located in the area shown in [Figure 12](#).

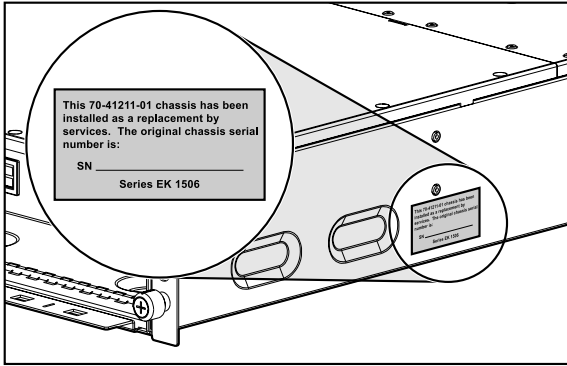


Figure 12: Replacement chassis serial number label location

1. Reinstall the MSA1500 cs in the rack.
2. Reconnect the fibre cable to the MSA1500 cs.
3. Reconnect the SCSI cables to the MSA1500 cs.

Note: After reconnecting all data cable to the MSA1500 cs make sure that all of the connections are tight and that the cables have been reconnected in the same configuration as the original configuration before replacing the chassis.

4. Reconnect the power cables to the MSA1500 cs.
5. Power on the MSA1500 cs.

Verifying the replacement

After replacing the failed chassis verify that:

- No error messages are displayed on the LCD.
- The power LED is solid green.
- The heartbeat LED is flashing green.

Returning the failed component

Please follow the return instructions provided in the new component package.

Additional information

For additional information, refer to the MSA technical documents web site at <http://www.hp.com/go/msa1500cs>.